

Some notes on the genus *Colubraria* Schumacher, 1817, with description of *Colubraria brinkae*, spec. nov.

(Mollusca, Gastropoda, Buccinidae)

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Some species of *Colubraria* are discussed and a new species, *Colubraria brinkae*, is described. *Tritonium tenerum* Gray, 1839, is the valid name for the species usually known as *Colubraria castanea* Kuroda & Habe, 1952. For *T. tenerum* Gray a neotype is designated.

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This paper should represent a brief attempt to classify all recent species of the genus *Colubraria* that are known on a worldwide scale. A list of all, in my opinion, valid species is provided here at bottom.



Fig. 1. *Colubraria tenera* Gray, 1839. Mactan Isl., Philippines. 60.4 mm.

The name of one of the most striking species of the genus, *Colubraria castanea* Kuroda & Habe, 1952, must be changed. Gray (1839) described (p. 111) *Tritonium tenerum*, but without providing any illustration of the new species. Unfortunately, no type material is preserved in the BMNH. However, the following description is so accurate that it can only be referred, in my opinion, to the species *Colubraria castanea* (replacement name for *Triton comptus* Sowerby III, 1875, preoccupied): "Shell ovate, turreted, thin, pale, fulvous, pellucid, cancellated, with equal fine longitudinal and spiral ridges; spire attenuated, longer than the mouth; whorls rounded, varices rounded, cancellated, with two brown spots. Mouth ovate, oblong, outer lip crenulated, throat smooth, inner lip thickened, smooth, elevated, canal short, perforated in front. Axis $3\frac{1}{2}$ inches. Inh. Allied to *T. maculosum*, but thinner and cancellated."

The size mentioned by Gray ($3\frac{1}{2}$ inches) reduces the number of the species to which the description could refer to only three species that can reach such dimensions, i. e. *C. muricata*, *C. soverbii*, *C. tenera*.

After elimination of *Colubraria muricata* Lightfoot, 1786 (= *Tritonium maculosum*), because it clearly differs from *C. tenera* in the ground colour which is whitish, whereas Gray describes its *C. tenera* as fulvous or reddish-chestnut, it is only *C. soverbii*, to which Gray's description could refer to. Considering that the description is very accurate, I am almost sure that Gray would have mentioned the dark spiral lines, which are so peculiar for this Indo-Pacific species, should he have had the true *C. soverbii* before himself. Due to the absence of this specific detail in Gray's description, I am sure that also *C. soverbii* can be eliminated.



Fig. 2. Holotype of *Drupa (Maculitriton) buitendijki* Bayer, 1933. Irian Jaya (New Guinea), Mnoekwari. Coll. W. C. van Heurn, 1920, Museum Leiden, Moll. Cat. No. 48a. 14.5 mm (left). — Syntypes of *Triton ceylonensis* Sowerby, 1833. Ceylon. BMNH Reg. No. 1991014. 41.8 mm, 34.2 mm, 27.5 mm (from middle left).

To conclude, there is no detail in the description of *C. tenera* that could refer to another species than what is now known as *Colubraria castanea*.

Consequently, the designation of a neotype is necessary. I have selected as neotype of *Triton tenerum* Gray, 1839 the syntype of *Triton (Epidromus) comptus* Sowerby, 1875 in the BMNH (Reg. Nr. 1979250). The provenience of this specimen is unknown, but is most probably the Philippines or Hongkong. Dimensions: 61.0×25.2 mm.

It should be further mentioned that the figured syntype of *Triton comptus* (from the Prevost collection) is from Hongkong (National Museum of Wales, Cardiff).

The identity of *Drupa (Maculotriton) buitendijki* Bayer, 1933, was also questionable. After examination of the holotype of this species it was confirmed that it is a member of the genus *Colubraria*. The holotype is a juvenile, though it can be clearly identified and distinguished from any other known species of the genus. The species has never been figured (with the exception of Bayer's figure of the type) in any paper, however, during the last years, more and more specimens of this deepwater species came up from several localities in the Indo-Westpacific (Somalia-Maledives-Philippines-New Caledonia).

The species is easily confused with *Colubraria ceylonensis* Sowerby, 1833, but can be immediately distinguished by the narrower, conical protoconch of *Colubraria buitendijki* (0.8–1.0 mm against 1.4–1.5 mm in *C. ceylonensis*). Further important differences of the two species are:

- 1) Larger size of *C. ceylonensis* (ca. 40–45 mm average against ca. 25–30 mm in *C. buitendijki*).
- 2) More rounded whorls in *C. buitendijki*.
- 3) Slightly shorter siphonal canal in *C. ceylonensis*.

C. ochsneri Hertlein & Allison, 1968, from the Eastern Pacific is a further species with which *C. buitendijki* can be superficially confused. However, the position of the varices is quite sufficient for differentiation of both species.



Fig. 3. Size comparison 1:1 of protoconches. Left: *Colubraria buitendijki* Bayer, 1933. Right: *Colubraria ceylonensis* Sowerby, 1833.

Beu & Maxwell (1987, p. 60) subdivided *Colubraria* into three different groups, according to their protoconchs, and I wish to maintain this division in my species list. However, a further division of genus *Colubraria* into two groups, according to the position of their varices, might be convenient:

- a) The final varix situated directly under the varix of the penultimate whorl, i. e. distant 360° from the final varix (*C. nitidula*, *C. testacea* etc.).
- b) The penultimate varix situated about 270° (e. g. *C. muricata*, *C. ceylonensis*) to 350° from the final varix (e. g. *C. tenera*, *C. springsteeni*).



Fig. 4. *Colubraria obscura* Reeve, 1844. Mocambique. 46.0 mm (left). *C. testacea* Mörch, 1877. Palm Beach Co., Florida. 44.0 mm (middle). *Fusus intertextus* Helbling, 1779. Sicily, Italia. 13.5 mm (right).

A brief consideration may be also useful to the species *Colubraria obscura* Reeve, 1844. Both, Beu & Maxwell (1987, p. 60, 61) and Emerson (1966, p. 175) apparently confound Reeve's taxon (which is clearly based on Indo-Pacific specimens!) with *Colubraria testacea* Mörch, 1877, a distinct species from the West-Atlantic (Caribbean to Brazil). Besides possessing a narrowly conical, pointed protoconch (whereas *C. testacea* has a bulbous small initiation) *C. obscura* can always be separated by the very smooth columella which is very granulose in *C. testacea*.

I disagree with Beu & Maxwell also with regard to the species *C. canariensis* Nordsieck & Garcia-Talavera, 1979. Beu & Maxwell suggest that this taxon might be based on Eastern Atlantic specimen of *C. obscura*. In my opinion, *C. canariensis* is a clearly distinct species which can be easily differentiated either from *Fusus intertextus* Helbling, 1779 (the species better known as "*Colubraria*" *reticulata* Blainville, 1829), or *C. testacea* (= *C. obscura* of Beu & Maxwell).



Fig. 5. *Colubraria canariensis* Nordsieck & Garcia-Talavera, 1979. Canary Isl. 34.9 mm.

Among the collection of Dawn Brink of Westville, South Africa, I recently identified two specimens of a *Colubraria* spec. from deep Taiwan waters. I first thought they were conspecific with *C. tenera* Gray, 1839, yet careful examination revealed specific differences between them which allow to describe it as a new species.

Colubraria brinkae, spec. nov.

Description. Shell small to medium sized for the genus, lightly built elongated turreted, eleven varices (including the final) present on the teleoconch. Protoconch small, subcylindrical, with a bulbous initiation, followed by two whorls (diameter of base of protoconch: 1.0 mm). Teleoconch whorls rounded, sculptured axially by about 40 ribs on the last whorl, forming small fine granules at the cross-points with the spiral cords. Colour of shell light brown. Columella smooth, enamelled, outer lip denticulated. Canal short, turned upwards. Last varix situated directly under the penultimate varix, i. e. 360°, with three brown blotches.

Types. Holotype: 30,4 mm; trawled off Taiwan (no other exact data available), in deep water; in Zoologische Staatssammlung München Inv.-Nr. 1870. — Paratype: 30,5 mm; off Taiwan; in collection Dawn Brink.

Differentiating characters.

Colubraria brinkae, spec. nov. may be distinguished from the similar species *Colubraria tenera* by different arrangement of the last two varices, different protoconch (having one additional whorl in *C. brinkae*!) smaller size than *C. tenera*, and other minor differences.

The new species is named in honour of Mrs. Dawn Brink, avid collector of this group of elongate ranellid-like shells.



Fig. 6. *Colubraria brinkae*, spec. nov. Ventral view. Left: Paratype, 30.5 mm. Right: Holotype, 30.4 mm, both off Taiwan.



Fig. 7. *Colubraria brinkae*, spec. nov. Dorsal view. Left: Paratype. Right: Holotype.

List of recent species of the genus *Colubraria*

Arrangement, as mentioned above, of the varices in group A and B, and protoconchs in subgroups 1, 2 and 3 (see Beu & Maxwell, 1987, p. 60) as per following explanation: 1) tall, narrowly conical protoconch with pointed apex; 2) small, narrow, sibcylindrical protoconch with bulbous but relatively small initiation; 3) large, subcylindrical, relatively wide protoconch with large, bulbous, very blunt apex

1)	<i>C. brazieri</i> Angas, 1869	Australia	A-3
2)	<i>C. brinkae</i> Parth, 1992	Taiwan	A-2
3)	<i>C. buitendijki</i> Bayer, 1933	Indo-Westpacific	B-1
4)	<i>C. canariensis</i> Nordsieck & Garcia-Talavera, 1979	Canary Island – Senegal	A-? Apex not seen
5)	<i>C. ceylonensis</i> Sowerby, 1833	Indian Ocean	B-1
6)	<i>C. cumingi</i> Dohrn, 1861	Indo-Pacific	A-2
7)	<i>C. eugenei</i> Bozzetti & Lussi 1991	South Africa	B-3
8)	<i>C. janlochi</i> Parth, 1991 (Apex: see Beu & Maxwell, 1987, p. 10, fig. 2B) Holotype deposited in Australian Museum, Sydney, Reg. No. C 167054	Australia	A
9)	<i>C. jordani</i> Strong, 1938 probably a synonym of <i>C. lucasensis</i>	Eastern Pacific	A-? Apex not seen
10)	<i>C. lucasensis</i> Strong & Hertlein, 1937	Eastern Pacific	A-1
11)	<i>C. mulveyana</i> Iredale, 1925 (Varices position not clear)	NSW, Australia	?-3
12)	<i>C. muricata</i> Lightfoot, 1786	Indo-Pacific	B-1
13)	<i>C. myuma</i> Garrard, 1961	NSW, Australia	B-3
14)	<i>C. nitidula</i> Sowerby, 1833	Indo-Pacific	A-1
15)	<i>C. obscura</i> Reeve, 1844	Indo-Pacific	A-1
16)	<i>C. ochsneri</i> Hertlein & Allison, 1968	Eastern Pacific	A-1
17)	<i>C. procera</i> Sowerby, 1832	Eastern Pacific	B-2
18)	<i>C. soverbii</i> Reeve, 1844	Indo-Westpacific	B-1
19)	<i>C. springsteeni</i> Parth, 1991 (the holotype of <i>C. springsteeni</i> is deposited in Australian Museum, Sydney, Reg. No. C 167055)	Philippines	B-2
20)	<i>C. tenera</i> Gray, 1839	Indo-Westpacific	B-2
21)	<i>C. testacea</i> Mörch, 1877	Caribbean-Brazil	A-2
22)	<i>C. tortuosa</i> Reeve, 1884	Indo-Westpacific	A-3

It should be mentioned that the species *Fusus intertextus* Hebling, 1779, and *Ratifusus alfredensis* Bartsch, 1915, could be included very probably in the genus *Colubraria* because of teleoconch features. However, more extensive studies on the family Buccinidae are necessary to achieve better generic classification. However, this is of secondary importance, whereas the specific status of the species is at present of primary importance.

Note

Through inadvertency of the printer the name of a new *Colubraria* described by myself in honour of Mr. Ian Loch (La Conchiglia XXII, No. 261, p. 50) has been spelled *janlochi* instead of *ianlochi*. According to the rules of the ICZN this misspelled name is unfortunately valid.

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